

Willapa Bay Hatchery Evaluation



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Presentation Overview

- **Background**
- **Production**
- **Infrastructure needs**
- **Hatchery reform**
- **Opportunities**
- **Summary**

Willapa Bay Hatcheries - Background



Naselle Hatchery



Nemah Hatchery



Forks Creek Hatchery

Hatchery	Year Built	FTE's	Biennial Budget	Funding Source (GF-S/DJ)	Capitol Assessment
Naselle	1980	3.5	\$1.2 M	78%/22%	Completed
Nemah	1953	2.39	\$545 K	85%/15%	2021-2023
Forks Creek	1899	2.41	\$518 K	86%/14%	Completed

Willapa Bay Hatcheries - Production

Species	Naselle	Nemah	Forks Creek	Total
Chinook	2,500,000	3,300,000	350,000	6,150,000
Coho	1,400,000	-	300,000	1,700,000
Chum	300,000	300,000	300,000	900,000
Steelhead	75,000	-	40,000	115,000
Rainbow Trout	-	19,000	4,000	23,000



Willapa Bay Hatcheries - Production

Volunteer Cooperatives

Species	Naselle	Forks Creek	Total
Chinook			
Coho	450,000	750,000	1,200,000
Chum		200,000	200,000
Steelhead		25,000	25,000

Naselle Hatchery - Needs

- **High risk for catastrophic failure due to failing infrastructure**
 - **Crusher Creek and Naselle River intakes and supply lines**
 - **Sediment removal ponds**
 - **Water pumping inefficiencies**
 - **Adult holding**
 - **Fish ladder and weir**
 - **Incubation/Office building**
 - **Raceways and 1/2 acre ponds**
 - **Pollution abatement pond**

Naselle Hatchery - Issues

Water Supply Valve Pond #5



Water Supply Valve Pond #1



Naselle Hatchery - Renovation

- **Final report for renovation sent to OFM in June 2016**
 - **Initial cost estimates prepared in 2007, \$14 M**
 - **Pre-design phase**
 - **Cost ~ \$23 M**
 - **Funding to move to design and permitting phase**
 - **Rebuild**
 - **New intakes, screening, pumps, settling ponds, and supply lines**
 - **(14) 10'x100' and (10) 20'x120' raceways**
 - **Incubation room and abatement pond**
 - **Bridge weir, fish ladder with sampling and presorting area, and adult pond**
 - **Reuse and recycled water**

Nemah Hatchery - Issues

- **Weir**
- **Intake**
- **Adult holding pond**
- **Adult trapping**
- **Upgrade supply lines**
- **Bridge**
- **Raceways**
- **Scheduled for predesign in 2021-23 fiscal years**
- **Low stream flow in summer months**

Nemah Hatchery - Issues

Nemah Weir



Forks Creek Hatchery – Issues

- **Possible weir on mainstem Willapa River**
- **Supply lines to raceways**
- **Replace fiberglass raceways**
- **Upgrade pump intake, remove siphon intake and adjacent barrier dam**
 - WCRI project \$4.4 M
- **Adult holding, trapping, sorting, and pollution abatement ponds upgraded in 2014**

Hatchery Reform

- **Integration rates**
- **Proportion of hatchery fish on spawning grounds for Chinook stocks**
- **Monitoring and evaluation**

Willapa Bay

- **Chum**
 - **Low cost**
 - **Rearing space**
 - **Off station releases and/or increased RFEG participation**
 - **Prey base for Chinook, Coho and Steelhead**
- **Spring Chinook**
 - **Provide spring and early summer fisheries**
 - **Net pen release**
 - **Impacts to native species**

Summary

- **Infrastructure**
 - **Naselle Hatchery**
 - **Renovation**
 - **Nemah Hatchery**
 - **Forks Creek Hatchery**
 - **Evaluation of weir for mainstem Willapa River**
- **Hatchery reform**
- **Other opportunities**
 - **Chum**
 - **Spring Chinook**

